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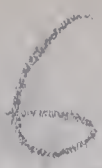


ARMOUR AND COMPANY

CHICAGO

Dear Sir:-

The "ARMOUR YEAR BOOK" for 1917 is presented to you as a digest of the Armour industries and the methods by which this business is conducted.

It is being sent you because we believe you have a natural interest in keeping in touch with economic conditions in all lines of industry. The facts as set forth in this book have been collected with the aim of creating a better and more widespread understanding of Armour and Company's function in the gathering of livestock and produce and the preparation, sale and distribution of the finished products.

We believe that with such understanding there will also be a realization that this function is a necessary one, and that it truly conserves values for producer and consumer alike.

We trust that the book will prove both of interest and value to you.

Yours very truly,

ARMOUR AND COMPANY.

ARMOUR AND COMPANY

Containing Facts about the Business and Organization

PHILIP D. ARMOUR
1832-1901

1917

An invitation is extended
to the general public
to visit the ARMOUR *plants,*
wherever situated.
Guides are in attendance
to conduct visitors through the plants,
and to explain the details
of the various operations
and processes.
During the year 1916
over two hundred thousand persons
visited the main plants
of ARMOUR AND COMPANY

Armour and Company

Officers

J. OGDEN ARMOUR,	*President*
Charles W. Armour,	*Vice-President*
Arthur Meeker,	*Vice-President*
Robert J. Dunham,	*Vice-President*
A. Watson Armour,	*Vice-President*
George B. Robbins,	*Vice-President*
F. Edson White,	*Vice-President*
Laurance H. Armour,	*Vice-President*
E. A. Valentine,	*Vice-President*
Frederick W. Croll,	*Treasurer*
Charles W. Comes,	*Secretary*
Charles E. Hazard,	*Ass't Sec'y and Ass't Treas.*

Directors

J. Ogden Armour
Charles W. Armour
A. Watson Armour
Laurance H. Armour
Philip D. Armour
Frederick W. Croll
Robert J. Dunham
Arthur Meeker
Samuel McRoberts
George B. Robbins
F. Edson White
E. A. Valentine

Foreword

THE purpose of this book is to present to the public the fundamental facts about an organization which exists to serve it. The manner in which this business is conducted and its importance as a factor in the security and comfort of the people are subjects worthy of intelligent study by every thoughtful person.

It is with the hope that the reader will gain a better economic understanding of this industrial undertaking and its operations that this book is published. And with such an understanding must naturally come the realization that as Armour and Company are not producers of raw material, but converters of the raw material into finished products, our prosperity is built on most effectively and most economically serving producer and consumer alike.

ARMOUR AND COMPANY.

To the American People

By J. Ogden Armour

TO-DAY, when rising costs have made foods a paramount issue, it seems an opportune time to lay before the serious minded public certain points it is to their self-interest to know.

And it is to those who take thought that I wish to speak; glad of the opportunity to present these points to their judgment.

It is not that the facts are to-day any different from what they ever were. But their consideration now has an especial timeliness.

Statistics, particularly of the past two years, have shown something that many have not been prompt to comprehend — the basic good faith of Armour and Company to consumers.

To fully realize all that this implies, you must understand the economic conditions on which this business is based.

The preparation of foods for human consumption is the oldest business on earth.

It goes back to the very foundations of history. As a consequence, although people do not always appreciate it, this is the most competitive of all industries.

Our function is to collect, prepare, transport, and distribute foods more efficiently and at less expense than the ever-present competitor can do it.

The work of preparing food stuffs is a business of natural competition. It always has been. It always will be.

This competition forces two things: operation at the lowest profit, and the giving of the utmost in service. For, if profits were excessive, concerns able to operate at lower cost would quickly capture trade. And if service were inadequate, those with greater efficiency would win.

Thus, the *amount* of production in a field so highly competitive must be very significant.

When you find a business in staples attaining size, you may be sure that in some broad economic way it makes for increased efficiency and gives a very fundamental service to consumers. In no other way could it continue to exist!

The remarkable thing about the American live stock business is that the maximum consumption is some two thousand miles away from the source of production. Yet, through the efficiency of Armour and Company, it is possible for you, no matter where you are, to set your table as bounteously as if you lived alongside the farm.

But also remember this—

Armour and Company did not become of national importance until there was a national need for their services.

This need did not arise until the East was no longer able to compete with the West in raising live stock. Then it was that the public, realizing perishable products sold on small margin cannot be passed long distances through many hands, began to demand more and more of us—began to make us strain every effort to keep pace with their needs.

But, despite our efficient service, our economies possible through volume and scientific utilization of waste in by-products, our perfection of preparation and marketing, the pay we receive for it all averages less than three cents on the dollar in our total year's business. One outstanding fact must, therefore, be obvious to every thinking man:

Any pre-eminence Armour and Company may have attained has been won on a straight basis of that highest of all ideals — service!

I have never deemed myself a writer on economics. Yet I am glad to present this message regarding the house founded by my father; for the motives of this organization have been my life's inspiration, and even though sometimes misunderstood, I may say with pride that they have always been true to the best interests of the American people.

J. Ogden Armour

Historical

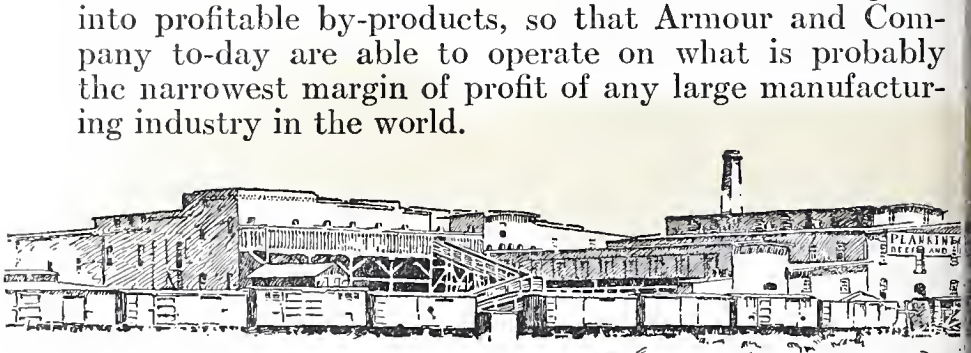
THE real beginnings of Armour and Company go back to the time when Philip D. Armour joined the great overland rush to the California gold fields in 1851.

For it was then he realized the future corn raising and grazing possibilities of the vast western prairies he crossed, and the advantages a western location would have over the market limitations and difficulties of the East.

The firm of Plankinton and Armour began a pork-packing business in Milwaukee in 1863. In 1867 a plant was established in Chicago, followed in 1869 by one in Kansas City. In 1875 Philip D. Armour moved personally to Chicago.

Then came the perfection of the refrigerator car, and for the first time fresh meats could be shipped to distant markets. The industry was revolutionized. By 1890 several plants and over forty Armour branch houses were established and markets extended in all directions.

From this new impetus the business has grown to nearly four hundred branch houses in the United States, more than twenty food producing plants, a chain of several thousand refrigerator cars and an organization that results in truest economy in handling, stability in supply-and-demand relations, efficient distribution, access to the best food markets, and the utilization of inedible parts into profitable by-products, so that Armour and Company to-day are able to operate on what is probably the narrowest margin of profit of any large manufacturing industry in the world.



Plankinton and Armour, Kansas City, 1869

Armour Ideals of Business

OUR business is to gather up the perishable food products of America, to prepare and standardize and then redistribute them to the world. To do this in a manner that will bring the most satisfactory returns to the American farmer, and then pass the highest quality food on to the consumer at lowest possible cost for the necessary preparation and handling, is the ideal on which the Armour institution is founded.

Working with a common objective, the men in the organization have absorbed this spirit. They have a pride in seeing that each transaction is conducted most satisfactorily. No product is ever "good enough" if it can be made better. Every resource must be utilized to move commodities through trade channels with least waste and highest efficiency.

We believe in and encourage among our workers, everything that puts zest and enthusiasm into life, diminishes the dangers and hardships of toil and furthers fellowship and better living.

To promote better farming is another Armour ideal, and one which is fostered by liberal educational work in animal husbandry, better breeds and soil improvement.

As the American farmer's largest customer, Armour and Company have a keen interest in all that makes for more efficient methods on the farm and greater rewards to farm industry.

Armour and Company keep in touch with the best sources of scientific information and business progress, such as the research bureaus of the U. S. Department of Agriculture and the various state universities, as well as schools of economics and business administration of the leading universities. They also hold memberships in the chambers of commerce of Chicago and other American cities.

The "High Cost of Living"

THE present trend of universally rising prices is of as serious concern to Armour and Company as to any other buyer of the world's commodities. For Armour, being a handler and distributor, and not a producer, has no control over production and must buy raw materials at current market prices, which are fixed by the relation of the available supply on the one hand to the ability and desire of consumers to buy on the other.

Obviously the "high cost of living" affects Armour and Company, and on a very serious scale. They must pay more for their material and labor. They suffer from restricted consumption of their products when retail prices rise, and from restricted live stock supply when prices fall. And the higher commodities go, the more money must be tied up in handling them.

Yet in the face of this, Armour and Company do play an important part in **holding down** food costs by:

1. Encouraging increased production through maintaining for the American farmer a cash market for what he has to sell whenever he is ready to sell it—a service requiring enormous plant capacity and manufacturing facilities such as Armour and Company have built up.
2. The manufacture of inedible parts into valuable by-products, which in turn tends to hold meat prices down to true-value levels.
3. Saving marketing costs by selling an ever widening range of products through the same great system of branch houses, refrigerator cars and salesmen, originally organized to handle but a few.
4. The standardization, branding and consistent advertising of one great line of food products which makes for quicker, steadier, and hence cheaper selling.

It is a matter of satisfaction to Armour and Company that, in doing these things, they have still been able to operate on a margin of profit that for a long period of years has averaged less than three cents on each dollar's worth of business done.

Meats on the Bill of Fare

MEAT is one of the most energizing of foods. It provides the proteids, or tissue-and-muscle-building element, and food authorities have established the fact that meat proteids are more easily digested and have a higher biological value in nutrition than vegetable proteids.

Those who have sentimental reasons for eating grains, nuts, fruits, and vegetables to the exclusion of meats should be respected in their opinions, but as a matter of dietary science the weight of evidence is in favor of a "well-balanced ration," including proper proportions of meat, animal fats, sugar, starches, fruit acids, and mineral salts to supply essential elements.

Besides supplying fresh meats for the table, Armour and Company prepare a multitude of other **meat products** in most appetizing and wholesome forms. Thus millions of consumers can enjoy at minimum cost many delicacies they would otherwise have to forego.

In addition, a Department of Domestic Science engaged in research and education is maintained under a well-known expert, to instruct housewives in devising better ways of preparing food—new and inviting dishes—and how to get the most value out of the food they buy. The instruction includes a valuable course in the selection and buying of meats and other foods.

An important economic phase of this department's work lies in teaching housewives the value of the less expensive cuts and how to prepare them most appetizingly.

U. S. Meat Inspection

HOW important it is for the consumer to look for the government inspector's stamp on meats will be recognized when it is remembered that only 60 per cent of the live stock slaughtered in this country is federally inspected. In 1915, nearly 300,000 animals were found diseased and condemned by the government. Armour and Company are in hearty accord with the government inspection system, for it *certifies officially* that all Armour branded meats and meat products are healthful and wholesome.

The inspectors work with scientific thoroughness. Four formal U. S. inspections are given, first of the live stock on the hoof, then three others before the dressed meat is ready for sale.

Meats smoked, cured, or otherwise prepared are given additional inspections in each stage of the processes. Condemned animals are killed and the meat treated with acid, so its sale for food purposes is impossible.

Besides examination of animals, the government inspectors have complete supervision over sanitary arrangements and are empowered to enforce the government standards and regulations of cleanliness and sanitation, in which they are given every co-operation by the company.

Federal inspection should be made universal and at the source, not only to avoid the danger of diseased stock finding its way into the local meat supply, but to prevent the great economic loss from this source, which is estimated at $100,000,000 yearly.

To the furtherance of this movement, Armour and Company are lending their best efforts.

Efficiency Standards

PROBABLY in no other industry are conservation and protection so essential as in the handling of a perishable product like meat.

From the time the live stock is purchased until the finished commodity reaches the consumer, the quality of the product rests largely upon the skill and care of the employes handling it. And in few industries is there such a large element of possible loss. A careless workman who might leave a truckload of fresh meat outside a cooler over night would waste more than many week's wages would amount to.

Depending thus upon the human element to a considerable degree, it is the constant aim of Armour and Company to develop a high standard of efficiency in their working force. Careful training and long experience make skilled specialists.

One of the noticeable facts about the Armour organization is that the great majority of the men make a life study of the meat business, coming with the concern as boys and growing up in the service. They take a just pride in performing an exacting and necessary part in the world's work. Few institutions are served with greater loyalty.

Standardization of all products and processes is maintained upon a scientific basis through the Armour chemical laboratories—one at each plant. The dozens of expert chemists in these laboratories are engaged in constant research work, developing new uses for by-products, improving manufacturing processes and eliminating unnecessary detail.

In mechanical operation, Armour and Company are quick to devise new processes, install new machinery and adopt new methods that make for higher efficiency and better products. And this standardization applies to all plants, so that an Armour Star Ham, for instance, smoked in any one plant is the same top-grade quality as that prepared in any other.

The Armour System of Distribution

FORTY years ago it was impossible to ship fresh meats during the summer months, or even to keep them sweet for more than a few days without ice. The great percentage of the product was salted, pickled and smoked, or canned, and selling was largely done on speculative markets.

But after the invention of artificial refrigeration, it became practicable not only to ship fresh meat in refrigerator cars, but to maintain systems of distributing stations to insure a uniform supply of fresh meats to thousands of retailers at all times. Prior to this there were no large scale chilling and storage facilities, and it was necessary for Armour to build from the ground up.

Since 1884, when the first Armour branch house was opened in Albany, New York, the system has been perfected until to-day there are nearly four hundred Armour branch houses serving the retail meat trade and representing an investment of about $15,000,000. Taxes are paid in every state in the union.

Several thousand refrigerator cars handle the output of twenty plants, and as these cars are owned and operated by Armour, no outside car shortages can affect this steady distribution! Points too small to maintain branches are served from the doors of Armour refrigerator cars which traverse fixed routes.

Armour and Company also operate an "ice-box service" for provisioning summer resorts, schools and other consumers off the main traveled lines. Icing stations are maintained all over the country for replenishing the traveling cars as necessary.

The Armour refrigerated branch house system is conceded to be one of the most effective distributive machines ever devised to serve the consuming public.

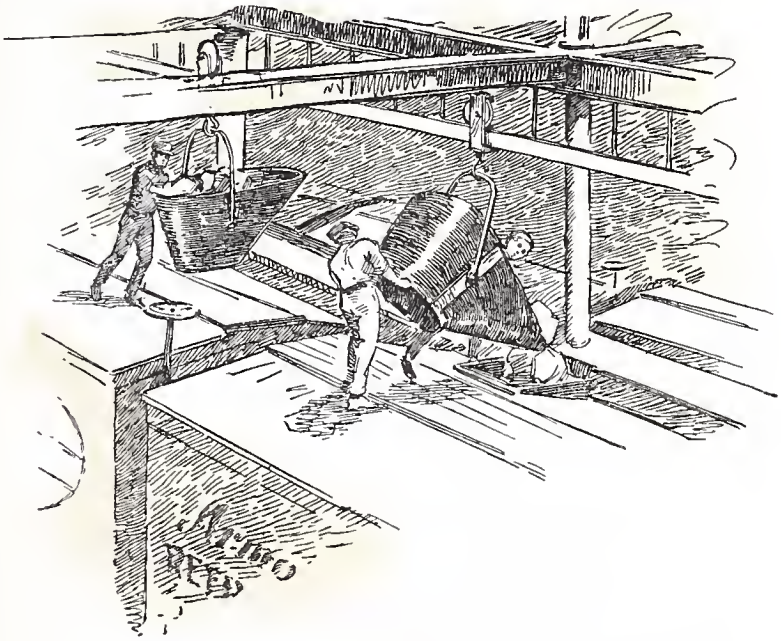
Refrigerator Cars and the Food Supply

THE development of the refrigerator car, more than any other single factor, is responsible for a steady and continuous supply of meat at reasonable prices to-day throughout the consuming centers of the country. In the early eighties the abundance and cheapness of fresh meats at Chicago made little difference in the price of food in Toledo, Pittsburgh, or New York. It was not until Philip D. Armour developed the refrigerator car on a large scale that fresh beef, mutton, and pork became as available to the many in the summer as in the winter, and at equalized prices, everywhere.

The foresight that through ownership of transportation facilities made Armour and Company independent is thoroughly justified by car shortage conditions as they exist to-day.

Nothing short of a complete blockade of the railroads themselves can affect the distribution of Armour meats and products.

While beneficially serving the consumer, Armour's refrigerator car line likewise plays an important part for the producer, through providing an ever-ready world-wide market for what he has to sell, whenever he is ready to sell it.



Armour and the Retailer

ARMOUR AND COMPANY serve hundreds of thousands of dealers in all parts of the world. And while Armour *purchases* of live stock are all made on a spot cash basis, Armour goods are sold on liberal credit terms. Domestic fresh meats bring returns in about seven days from date of sale, cured meats in about fourteen days. Fertilizer credits are liquidated in an average of eight months. In dealing with foreign customers, Armour and Company are disposed to meet the credit and other trading customs of merchants everywhere.

In times of public stress ordinary credit restrictions are modified or suspended. During the cotton crisis of 1914, when the price stood at 6 cents a pound, Armour and Company took over $6,000,000 worth of cotton from Southern farmers in payment of claims, and held most of it until it rose to 8 cents. It was then sold, on orders from the farmers themselves, and the difference of $1,500,000 remitted to the customers, thus preventing the sacrifice of a valuable crop.

It is an Armour maxim that "every sale must benefit the dealer more than it does Armour and Company." To this end, Armour works as hard to help move the goods off the dealer's shelves as to place them there.

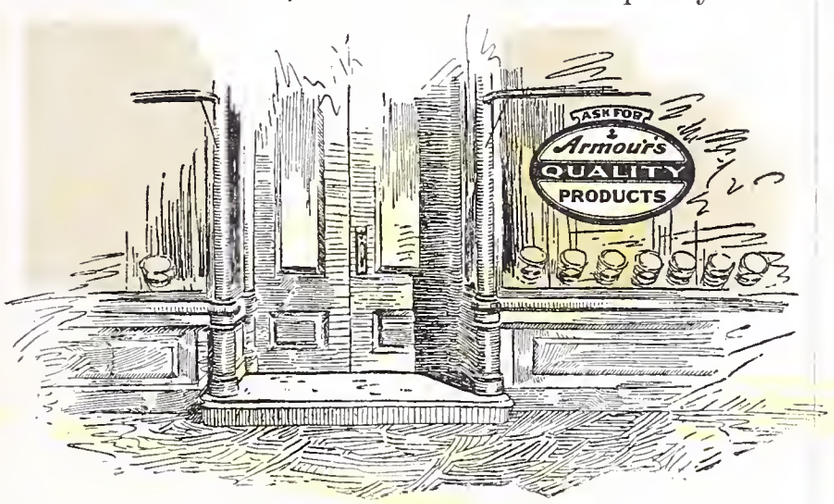
Besides conducting an extensive national advertising campaign, the company maintains a Dealer Service Bureau to give merchants training in better store methods, modern accounting, how to buy and sell more advantageously, and other ways that will help him conduct his business more profitably. With nearly four hundred Armour branch houses covering the country, the retailer can get quick and frequent supplies and thus avoids the burden of having to carry heavy stocks and tying up valuable capital.

Why Armour Advertises—and How

ARMOUR advertises to simplify selling. This is obvious, but the *way* in which Armour advertises and *how* this advertising benefits retailers and consumers is decidedly important, as it is an integral part of the Armour merchandising policy, carefully planned and effectively carried out.

Investigation has shown that the retailer's prime difficulty lay in the fact that there were too many brands of the same article, too many "slow sellers," of inferior quality, hence cut prices were necessary, and a consequent loss of profit ensued.

The solution of the problem was standardization of dealers' stocks. The first step taken was in establishing a line of hundreds of Armour's highest quality products under one brand—the famous Armour Oval Label. Then an institutional advertising campaign was inaugurated, designed to make the Oval Label familiar to every consumer of food products as the mark of Armour's first selection from the highest grade. So to-day the retail merchant can concentrate on the largest and most complete line of commodities ever assembled under one label and advertised under one name. In addition to the national institutional advertising done, an abundance of sales helps, signs, cutouts, window displays, etc., are supplied dealers, which connects the advertising with every store carrying the Oval Label line, and identifies it as a "quality store."



How the 3,000 Products of Armour Make for Lower Selling Cost

IT is frequently asked why Armour and Company manufacture such an extensive line of products. The reason is a purely economic one, both in the manufacturing end and in the distributing end of the business, and results in ultimate benefit to producer and consumer alike.

Hundreds of valuable by-product commodities have been added to the Armour list through the utilization of what would otherwise be wholly or partly wasted in the killing and dressing of animals, and this saving means better prices to the stock raiser on the one hand, and lowering the cost of beefsteak to the consumer on the other.

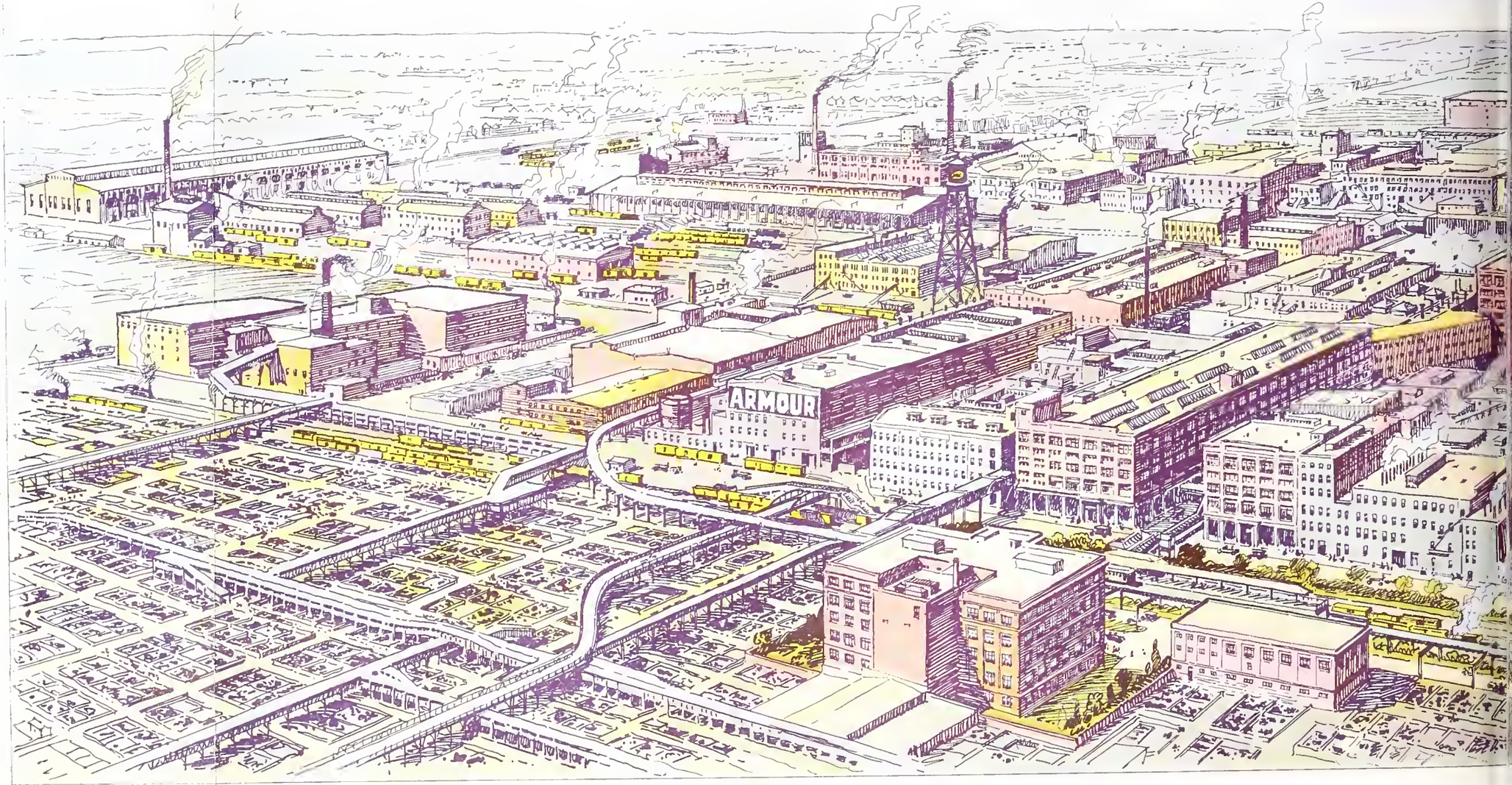
In selling and distribution, certain fixed charges remain the same whether much or little business is done.

But by giving the selling force many things to sell, these same fixed expenses are spread over a larger volume of business, and thus the consumer of canned goods, dairy products or soap is able to buy them cheaper than otherwise.

Only through many by-products and extra lines is it possible to maintain the great distributing system and render the efficient service that Armour does. The added products help to bear the burden of the fresh meat distribution.

In the selection of these commodities, Armour is in position to choose the highest grades. Wherever nature produces the best foods, Armour plants and Armour buyers are found—as in the cheese-making regions of Wisconsin, the grape-growing sections of New York and Michigan or the fisheries of the Pacific.

The Armour Oval Label assures the top grade in the choicest foods from everywhere.



Chicago Plant of ARMOUR AND COMPANY, *the world's greatest food purveyors*

GROUND AREA, 98 ACRES—FLOOR AREA, 8,292,000 SQUARE FEET. NUMBER OF EMPLOYEES, 12,000. AVERAGE NUMBER OF CARS LOADED DAILY AT CHICAGO PACKING PLANT, 200. TONS REFRIGERATION DAILY, 3,000. BOILER HORSE POWER CAPACITY DAILY, 18,000. DAILY KILLING CAPACITY—CATTLE, 2,500; HOGS, 10,000; SHEEP 9,000.

SOME OF THE ARMOUR PRODUCTS

EDIBLE

Dressed Beef	Extract of Beef
Dressed Pork	Bouillon Cubes
Dressed Veal	Dry Salt Meats
Dressed Mutton	Brine Pickle Meats
Fresh Hearts, Livers, etc.	Vinegar Pickle Meats
Fresh Sausage	Sweet Pickle Meats
Smoked Sausage	Smoked Meats
Canned Meats	Dried Meats
Lard	Dry Sausage
Neutral Lard	Boiled Hams
Oleo Oil	Canned Soups
Oleomargarine	Mince Meat
Cooking Oils	Gelatin

Pepsin and other Pharmaceutical Products

Butter	Peanut Butter	Soda Fountain Supplies
Eggs	Canned Fish	Canned Fruits
Cheese	Canned Vegetables	Preserves and Jellies
Poultry	Condiments	Flavoring Extracts
Evaporated Milk	Relishes	Vegetable Shortening
Pork and Beans	Rolled Oats	Grape Juice

INEDIBLE

Toilet Soaps	Glue	Sausage Casings
Toilet Requisites	Sand Paper	Violin and Tennis Strings
Laundry Soaps	Curled Hair	
Cleansers	Scoured Wool	Surgical Ligatures
Lard Oils	Leather	Fertilizers
Neatsfoot Oil	Tan Bark Extract	Stock Feeds
Glycerine	Blood Meal	Anhydrous Ammonia
Ox Gall	Case Hardening Bone	Lanolin

In addition to making their own grape juice and putting up their own brands of strawberries, apples, peaches, cherries, raspberries, peanut butter and pork and beans, Armour and Company prescribe the formulas and take the output of dozens of canneries for tomatoes, peas, asparagus, green corn, kraut, salmon, sardines, tuna fish, ketchup, evaporated milk, California peaches, Hawaiian pineapple, etc. This also applies in the case of creameries and cheese factories. Armour and Company maintain their own stations for fattening large numbers of fowls and other poultry on milk and oatmeal.

Soap, Glue, Curled Hair, Sandpaper

THESE commodities rank high as revenue-producing by-products in the Armour plants, and are the outgrowth of the Armour policy of complete utilization of all parts not intended for food. In the manufacture of these articles, Armour and Company enjoy an unique advantage in being able to select the raw materials at the source of supply, and to develop their best uses.

The first output of the Armour Soap Works was laundry soap in 1896, followed in 1897 by glycerine and in 1902 by toilet soaps. New lines have been added from time to time until, to-day, the Armour Soap Works is one of the largest and best organized soapmaking establishments in the world.

The Armour Glue Works has an annual capacity of 15,000,000 pounds. Two classes of glue are made, one known as hide glue, made from the hide trimmings and sinews of cattle; the other as bone glue, made from heads and feet of cattle and hogs. All grades are produced for use in hundreds of different manufacturing industries.

Sandpaper, having a logical connection with glue, is also made in large quantities, and is sold extensively to wood and metal workers, automobile and shoe manufacturers and others.

Curled hair contributes much to the ease and comfort of mankind, and the demand is constantly increasing for this useful article, the annual output of the Armour plants being 7,500,000 pounds.

Each of these has had to be developed, from a selling as well as from a manufacturing viewpoint. In many cases there had been no demand. Frequently a brand new product met with positive resistance when first introduced to the consumer, as oleomargarine for instance. This development of new and valuable products involves the choosing of a name, establishing a standard of quality and price, designing a package, advertising and actual distribution into retail stores throughout the country.

Armour by-products find a market—fill a need—are related to practically every major industry in the world.

The Armour Tanning Industry

IN the tanning of hides and manufacture of leather Armour and Company utilize to best advantage the most important by-product of the live stock they buy and kill.

The Armour Leather Company and its subsidiaries operate twenty plants for the tanning of belting, harness, sole, and upper leathers and the processing of pig skins, sheep skins, and raw wool. The recent addition of four new plants brings the total volume of hides treated to about 1,750,000 annually. These plants are under one executive management, and the entire output is distributed by one selling organization, which makes still further for reduced operating cost and consequent benefit both to the seller of the raw material and the user of the finished product.

Besides the tanning factories there is also a plant for the making of tan bark extract. In addition to consuming the greater part of Armour's domestic hides, the Armour Leather Company buys extensively in North and South America, China, New Zealand, and Australia.

The leather situation since the beginning of the European war has been difficult to meet. The curtailment of production and movement of hides (Russia in normal times being a big producer), as well as the exhausting of surplus stores, has made the situation most critical. Prices are necessarily high and it taxes the average purse to provide shoes for the family. The interests of the public demand better animal husbandry, more herds and more hides, and in this movement Armour and Company are lending substantial aid.

The wide range of usefulness of leather

The Armour Fertilizer Works

THE soil must be fertilized if people are to be fed. Fertilizer is plant food. In European countries where fertilizers are largely used average aere yields are from two to four times as heavy as in the United States. Increased acre yields deerease the pound cost of growing. Low growing costs insure farm profits.

The Armour Fertilizer Works was organized originally to return to the land as fertilizer and stock feed that portion of the animal not needed by the people for food or clothes. It has grown away beyond its original scope with the increased demand for manufactured manures and feeds and now is the world's third largest maker of fertilizers. It manufactures chemical as well as animal plant food for different crops, soils and climates. It operates some thirty-six plants throughout the world, owns phosphate mines, manufactures acids and other chemicals; has a line of boats to move its product. Its manufacturing is in charge of a staff of chemical engineers. It maintains scientific research fellowships that better and cheaper methods may be found for manufacturing soil fertility. It has established an agricultural research bureau headed by a prominent scientist that the farmer and Armour may be brought closer together by mutual co-operation in solving farming and food problems, all to the end that the public may secure "more and better products from the farm."

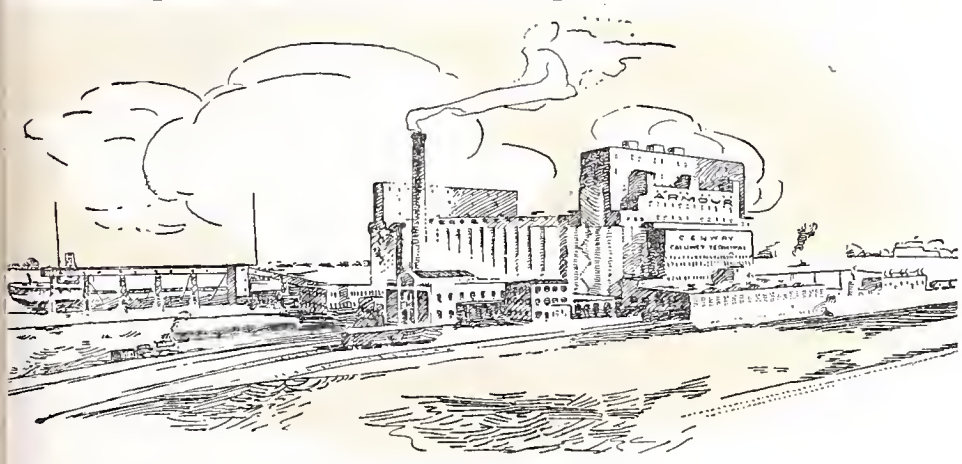
The Armour Grain Company

THE Armour Grain Company, an allied industry, is owned and operated entirely independent of Armour and Company. This Company operates a large system of country elevators and receiving stations where farmers can turn their grain into spot cash.

From these points the grain is shipped to large terminal warehouses, held ready for instant distribution to any point necessary. Thus these central reservoirs act as equalizers of supply and demand. The total warehouse capacity of the company is about 25,000,000 bushels, including one of the largest elevators in the world, the Calumet Terminal Elevator at South Chicago, nearing completion, with a capacity of 6,000,000 bushels. A private wire system of 4,500 miles is necessary in the economic handling of this vast business.

Much loss by shrinkage and deterioration is avoided by the use of laboratory tests and scientific methods of handling, so that the company is able to operate on a much closer margin of profit. The Grain Company is also co-operating actively with federal, state and private agencies to stamp out the Hessian fly pest which annually wastes 50,000,000 bushels of wheat, an unnecessary loss of the nation's breadstuffs.

Another branch of the company's activities is in the manufacture of oatmeal and other cereals. From the by-products of these, valuable stock-foods are made, which being returned to the farm have a direct relation to keeping the price of meat at true value levels by lowering the cost of animal feeding.

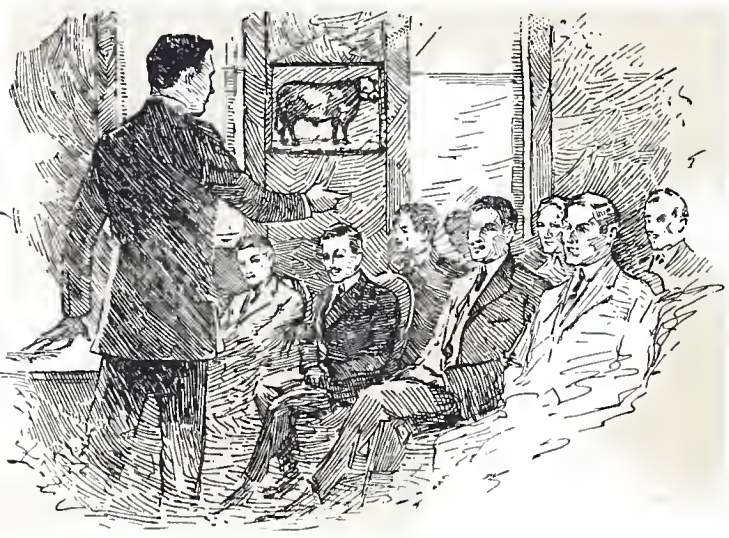


More Live Stock and Better Breeds

IF the consuming public is to have a steady and uniform meat supply at reasonable prices, marked improvements must be effected in the live stock industry. The practice by some farmers of selling corn and other feedstuffs instead of feeding them often brings cattle to market before they are ready, results in alternating oversupply and undersupply at the points of slaughter, and prevents the necessary increase of live stock commensurate with growing population.

Armour and Company are vitally concerned in this problem and every aid is given toward better farming practice and improved animal husbandry. They have imported pure bred strains and put registered breeding animals at the disposal of progressive farmers. In addition to promoting Pig Clubs and Corn Clubs among farm boys, the company has established scholarships in connection with the International Live Stock Exposition to raise the standards of cattle judging. A Bureau of Advisory Agricultural Service is maintained, which producers everywhere are encouraged to consult freely. In every possible way, Armour and Company are trying to extend and improve the live stock industry.

The stamping out of preventable diseases is another matter of prime importance. Armour and Company's books showed a loss in one year of over $1,000,000 by post-mortem condemnation of carcasses after the animals had passed inspection on the hoof. Competent judges estimate at $100,000,000 annually the total economic waste due to stock diseases. Much of this can be prevented, and Armour educational work is being directed toward this end.



Opening New Live Stock Markets

IT is important to the welfare of the country that constantly growing population shall not outstrip the development of the live stock industry. To encourage greater production, Armour provides cash markets and ready outlets close to the farmer's supply source.

Fresh territories are also developed by the building of new plants—some in most remote regions. For example, Armour and Company have just completed a modern packing plant at Jacksonville, Florida, which should give a very decided impetus to live stock raising in that section hitherto mainly interested only in the growing of fruits and minor crops.

Another new Armour plant, second only to that in Chicago, is under construction at St. Paul, to serve a section that has recently begun to raise hogs in greater quantities and feels the need of a closer, larger, and more competitive market.

Still another great plant has been established in Argentina, at a cost of $5,000,000, primarily for the purpose of supplying meats to Europe, and thus relieving the drain on the resources of the United States.

The building of a plant in a new territory is likewise accompanied by educational and constructive work among the farmers who are to be served by the plant. When the new plant at Fort Worth, Texas, was ready, a hog raising campaign was inaugurated along with other campaigns for diversified farming, with the result that in two years Texas, which had formerly produced only a few hogs and those of poor quality, leaped into the front rank in hog production.

The Buying of Live Stock

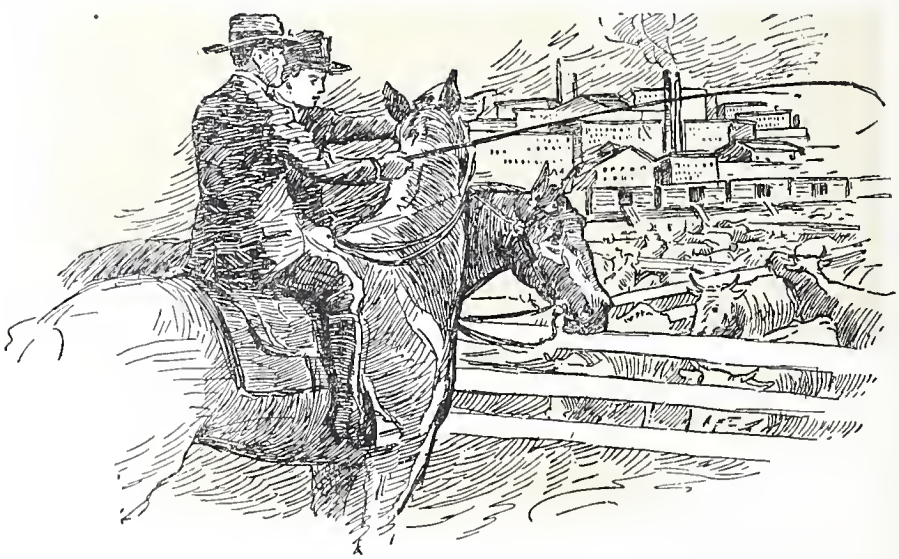
THERE is a widespread misunderstanding of the live stock market and its buying and selling operations. The idea that the larger packers dictate live stock prices is entirely erroneous.

Cattle raisers ship their stock *when* and *as* they please without regard to anything but pure self interest. Freight charges and shipping risks determine which market live stock will go to, and outside factors have little influence with the shipper.

Shippers consign their stock to their own commission house to be sold, either at the ruling price for the grade or at a figure set by the shipper. Prices are the result of oversupply or undersupply of stock in its relation to the demands of the day, week or season, as represented in the competition between local buyers and also with eastern buyers seeking stock for export or eastern slaughter.

The market is not restricted; any one can buy or sell, and the trading is governed by stringent rules fixed by independent bodies—as the Chicago Live Stock Exchange in Chicago, and similar bodies at other live stock centers, formed to safeguard the interests of shippers, commission merchants and buyers.

Briefly stated, Armour and Company have no advantage in the live stock market beyond their ability to handle large numbers of animals with the highest economy, and to distribute their products at the minimum cost.



Welfare of Employes

THAT improved working conditions make for greater efficiency and a better product is a well-recognized Armour policy, and one that is constantly practised in helpful welfare activities.

Well equipped hospitals with professional supervision, nurses and attendants are maintained at all the plants. Cases of accident receive the best of care, but more than that, preventive measures are taught and applied. A corps of graduate nurses make the rounds of the plants daily visiting the girls and advising them in matters of health and hygiene.

Pleasant lunchrooms and restrooms are provided with trained attendants, and various organizations co-operate with the Company to promote the welfare of these workers. Women's summer camps maintained at Round Lake, Ill., and elsewhere enable several hundred girls during every summer season to enjoy a week in the country as guests of the company.

For the men in the general office who lead somewhat sedentary lives, there is a $75,000 gymnasium, fully equipped for exercise and athletic sports, with a physical director and corps of assistants to give instruction to any one desiring training. Encouragement is given to the rivalry of athletic teams, and in all ways the spirit of loyalty to the organization is promoted, team-work developed and the mutual welfare advanced.

One of the first moves was to assign a special instructor to the task of teaching men to swim—which is not only a good form of invigorating exercise, but an accomplishment which often enables men to save their own lives and the lives of others. Many of these men, some of them gray-headed department managers, are already swimming in deep water for the first time in their lives.

"Safety First" at Armour's

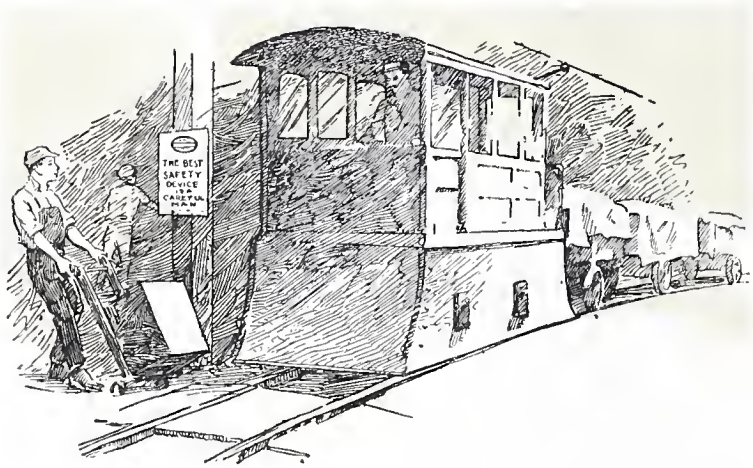
TO truly protect against accidents it is necessary to have active co-operation on the part of the workers themselves in addition to the installation of the regular safety devices and appliances.

This has been accomplished most effectively in the Armour plants through the appointment of "safety first" committees of the employes in every department, and to-day there is a sincere desire on the part of all employes to further the efforts of the company in reducing the chances of accidents to a minimum.

A systematic course of instruction on the methods of avoiding injury was carried on for many months, with the aid of moving pictures, charts, diagrams and other devices. Each foreman is the head of his particular committee, and equipped to carry on the educational work.

Tested devices of all kinds are employed to safeguard operators of machines. Every place of danger in the plants is designated by a distinctive sign, and caution is ranked among the duties of every workman.

In the department of sanitation, Armour and Company insist upon measures of strictest cleanliness. Ventilation, lighting, removal of steam and odors, cleansing of floors, enforcement of cleanliness among employes, and disposal of waste, all have been reduced to a system. In this way the "Safety First" principle applies not only to workers in the plants but to consumers of the products. Discharge is the penalty of disobeying the rule of cleanliness in handling meats and food products.



Armour and Company Pension Fund

EVERY salaried employe of Armour and Company, except married women and boys under sixteen years of age, is eligible to participate in the benefits of the Pension Fund created by the Company on November 1, 1911.

An endowment fund of $1,000,000 was appropriated by the Company, but that the Fund may be co-operative, employes receiving from $520 to $7500 a year contribute 3 per cent of their salaries annually. Refunds are provided for employes leaving the service, and thus losing their rights to share in the benefits.

Officers or employes who complete twenty years of continuous service may be pensioned, at 57 years of age for men and at 50 years for women. The compulsory retirement age is 65 years.

Pensions are computed at 2 per cent of the salary at retirement, multiplied by the number of years of continuous service.

In case of death after fifteen years of continuous service, the widow or dependent children of the employe receive a pension computed on a basis of one per cent for each year's service.

Decedents having served under fifteen years leave to their dependents the sums they paid into the Fund with compound interest at 4 per cent. Unmarried employes are permitted to name as beneficiaries their parents or brothers and sisters.

The Pension Fund is a valuable "good will" factor and an added incentive to loyal and efficient co-operation.

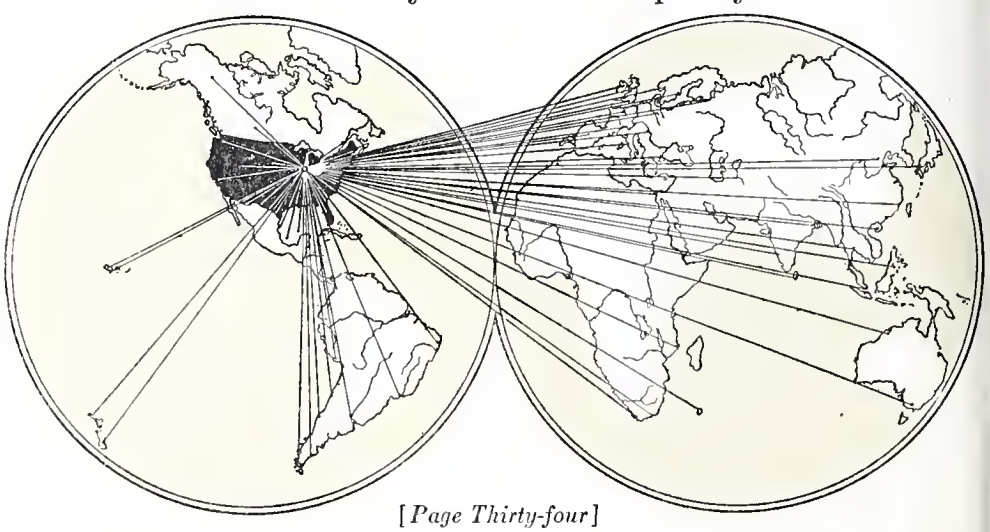
Armour and Company Abroad

ARMOUR AND COMPANY do business in virtually every commercial country of the globe; and Armour products are found practically wherever steamships or railroad trains travel. To-day the familiar Armour Oval Label is hardly less known in Europe than in America. Armour packing plants are operated in Argentina, Brazil, Canada and New Zealand, and Armour selling organizations are located in London, Paris, Rotterdam, Hamburg, Bremen, Frankfort, Copenhagen, Stockholm, Milan, Cape Town, Havana, Buenos Ayres, Panama, Canada and elsewhere.

In export trade, Armour and Company operate a fleet of ships, one of the newest being the 5,500-ton Armour Steamship "Navajo," plying in the New York-London service. That delivery might be uninterrupted, even in such exigencies as the European War has brought forth, Armour and Company chartered many vessels and where they could not charter them, bought them outright.

Armour stands in close relation with the commissary departments of many nations, and the navies and armies of the world are provisioned, in part at least, with the standard brands of Armour and Company. Both Polar and Equatorial exploring expeditions usually carry foods packed by Armour to meet their special requirements.

It is an Armour policy to conform as closely as possible to the trade and credit customs of the foreign countries where it does business—and to serve the people of all lands most economically and most acceptably.



Facts About Armour and Company

Figures below refer to the year 1916 only

Total number of employes	45,000
Number of killing plants	16
Number of branch houses	416
Ground area all plants (acres)	500
Floor area all plants (sq. ft.)	20,000,000
Number of visitors at plants	250,000
Amount paid for cattle, U. S. figures only	$116,077,000.00
Amount paid for sheep " " " "	$ 17,526,000.00
Amount paid for hogs " " " "	$112,624,000.00
Amount paid for calves " " " "	$ 4,950,000.00
Number of fertilizer plants	36
Refrigeration capacity, all plants (tons per day)	17,126
Motor trucks in service	482
Runabouts in service	466
Wagons	1,204
Buggies	427
Horses	1,497
Tons of coal consumed annually	785,183
Bbls. of oil consumed as fuel annually	715,215
Tons of salt used annually	90,000
Pounds of sugar used annually	900,000
Expense for stationery, etc	$250,000.00
Postage expense	$300,000.00
Telephone and telegraph expense	$500,000.00
Cans and pails for canned meat and lard	$832,000.00

FINANCIAL STATEMENT

ARMOUR AND COMPANY

For Fiscal Year Ending October 28, 1916

ASSETS AND LIABILITIES

Assets

CAPITAL ASSETS		
Lands, Buildings, Plants, Machinery, etc.	$54,116,062.70	
Refrigerator and Other Cars	3,913,677.00	
Car Trust Agreement	4,848,416.00	
Investments in Allied Companies	28,152,522.31	
TOTAL CAPITAL ASSETS		$91,030,678.01
CURRENT ASSETS		
Inventories of Product, Material and Supplies	$57,120,917.52	
Miscellaneous Marketable Investments	11,091,429.64	
Bills Receivable	5,354,017.00	
Accounts Receivable	56,282,921.37	
Cash on Hand and in Banks	7,893,408.79	
TOTAL CURRENT ASSETS		137,742,694.32
		$228,773,372.33

Liabilities

CURRENT LIABILITIES		
Bills Payable	$27,865,600.00	
Accounts Payable	13,155,831.29	
TOTAL CURRENT LIABILITIES		$41,021,431.29
RESERVE		
For Bond Interest		918,824.31
CAPITAL LIABILITIES		
Bonds		50,000,000.00
Capital Stock	$100,000,000.00	
Surplus	36,833,116.73	
NET CAPITAL INVESTMENT		$136,833,116.73
		$228,773,372.33

A Dividend of $2,000,000 was paid January 15, *1916*, out of 1915 Earnings.

Income and Expenditures

Income

Net Profits on Manufacture and Sales after deducting charges for Repairs and Depreciation, including also Earnings of Subsidiary and Allied Companies		$27,162,164.48

Expenditures

Interest on Bonds		$1,809,783.51
Interest on Borrowed Money		1,925,424.67
Administrative Expense		1,960,602.26
Taxes, Insurance, etc.		1,366,354.04
Net Earnings	$20,256,000.00	
Less Donation to Pension Fund	156,000.00	20,100,000.00
		$27,162,164.48

A dividend of 2 per cent has been declared, payable January 15, 1917.

The gross sales were $525,000,000. The net earnings, after all charges were paid, were $20,100,000, equivalent to twenty per cent on the capital stock and 14.7 per cent on the invested capital. The net profit on the business done was 3.8 cents on each dollar of sales. Armour and Company paid over $300,000,000 to live stock producers and farmers during this period.

The fiscal year of 1916 has been the most successful in the history of Armour and Company just as 1910 was a very profitable year. But the year following 1910 was the most unprofitable, due to declining values. The very high plane of values of stock on hand existing at the beginning of 1917, to avoid a corresponding loss, will also require extreme discretion and cautionary procedure in the conduct of this business, during the expected readjustment to a normal plane of values.

The greatest increase in percentage of profits the past year has been from by-products and side lines and from foreign business rather than from fresh meats.

Because of the ever-increasing demands for new capital expenditures in the business, it was deemed wise not to increase dividends, but to declare the usual dividend disbursement of $2,000,000, equivalent to two per cent on the capital stock and to continue the former policy of putting back surplus profits into the business.

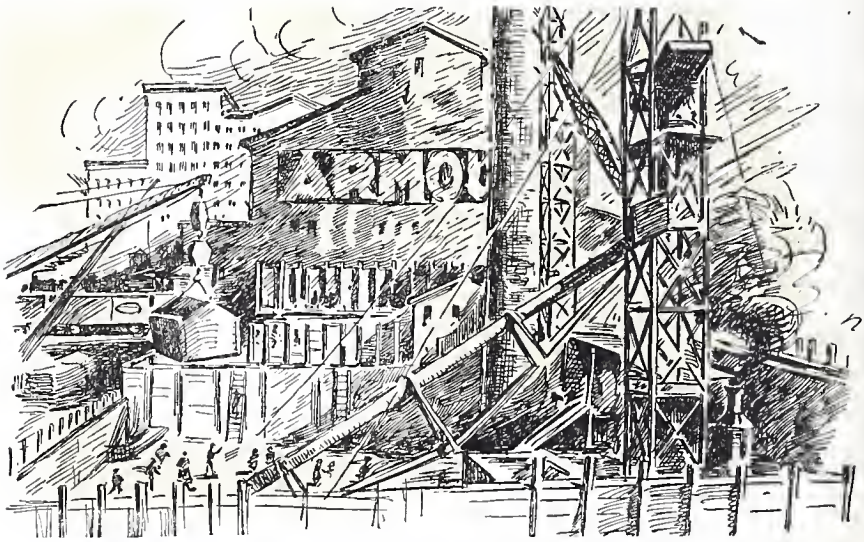
[Signed] J. Ogden Armour.

The Extension and Improvement of Plants

FOR the fiscal year of 1916, $7,500,000 was expended in building and improving plants and branch houses. Of this amount $5,000,000 was used largely in the construction of new buildings for packing plants, built of steel and concrete, many with walls and floors of vitrified brick, affording the most sanitary type of construction ever introduced in packing houses.

Among the improvements may be enumerated: at Chicago, a new wholesale market and beef cooler building; new oleomargarine building; the installation of additional refrigeration machines and power plant; at Omaha, new office building and cooler building; at Denver a killing building, one of the finest in the West; at Kansas City a new beef-killing building and additional cooler and storage facilities; at Jacksonville, Fla., a new packing plant; and at our Indianapolis, East St. Louis, Sioux City, Fort Worth, and St. Joseph plants, additions have been made. Extensions and improvements were also made at many branch-house distributing stations throughout the country.

These expenditures were made not only to anticipate increased production as it may come, but to conserve the quality of the finished products. The increasing value of meat makes it essential that it be surrounded by every safeguard in handling, and that highest standards be maintained in its preparation.



Telling Our Story to the Public

THE advertisement reproduced on this page is one of a series which appeared in the leading daily and financial newspapers of the country during December, 1916, and January, 1917. The purpose of this advertising was to place frankly before the thinking public facts regarding Armour and Company, their place in the world of human needs, and the manner in which they fulfill their function.

Armour and Company not only welcome the utmost publicity and investigation of their business and methods, but believe that voluntarily putting these facts before the people will result in a better and more friendly understanding on the part of the public.